

REMARKS

Claims 1, 3-8, 12-13, 15-20 and 25 are pending in the present application. By this amendment, Claims 1 and 13 are amended; and Claims 2 and 14 are canceled. No new matter has been added to the claims. Applicants respectfully request reconsideration of the present claims in view of the following remarks.

I. Prior Art Rejections:

Claims 1-8, 12-20 and 25 stand rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 5,407,979 to Wu et al. (hereafter "Wu") in view of Japan 11-048436. This rejection is respectfully traversed.

Claim 1 is directed to, *inter alia*, a breathable, biodegradable/compostable laminate material comprising a biodegradable nonwoven material; and a stretched, filled, biodegradable film; wherein the breathable, biodegradable/compostable laminate material has a water vapor transmission rate that is greater than about 3000 g/m²/24hr, wherein the biodegradable nonwoven material comprises aliphatic polyesters; polylactides; polyhydroxybutyrate-co-valerates; sulfonated polyethylene terephthalates; blends or mixtures thereof. Claim 13 is directed to, *inter alia*, a method of making a breathable, biodegradable/compostable laminate material comprising laminating a biodegradable nonwoven material and a filled, biodegradable film to form the breathable, biodegradable/compostable laminate material; further comprising the step of stretching the filled, biodegradable film before laminating to the biodegradable nonwoven material; wherein the breathable, biodegradable/compostable laminate material has a water vapor transmission rate that is greater than about 3000 g/m²/24hr, wherein the biodegradable nonwoven material comprises aliphatic polyesters; polylactides; polyhydroxybutyrate-co-valerates; sulfonated polyethylene terephthalates; blends or mixtures thereof.

Wu is directed to a film/nonwoven laminate that is stretched after lamination to form the finished product. The laminate uses a polycaprolactone polymer.

Japan 11-048436 is directed to a film using a filler material as a bulking agent.

It is respectfully submitted that the combination of Wu and Japan 11-048436 fails to teach or suggest Applicants' claimed invention. The films disclosed in

Wu use polycaprolactone, a polymer not claimed by Applicants. As such, Wu fails to teach or suggest Applicants' claimed laminate and method.

Additionally, the films of Wu are made by a different process than Applicants' claimed methods and, therefore, cannot be said to teach or suggest Applicants' claimed methods. As such, the resulting films are different. Wu teaches a process wherein a film is laminated to a nonwoven material. Then, the film is stretched. By laminating prior to stretching, Wu's film will have enhanced adhesion with the nonwoven since the softened film will penetrate into the structure of the nonwoven. However, this penetration of the film into the nonwoven will adversely affect the breathability of the film. The Examiner argues that since breathability of the film is due to stretching of the film, the degree of breathability may have been optimized simply by stretching. However, this argument runs counter to the teachings of Applicant and is also not supported by Wu. Applicants' claimed films have a water vapor transmission rate that is greater than about $3000 \text{ g/m}^2/24\text{hr}$. This is higher than prior art films and nonwovens, as can be seen from Applicants' Comparative Examples A and D, wherein the films alone have water vapor transmission rates of less than about $1400 \text{ g/m}^2/24\text{hr}$. Since these materials imbed in the structure, this lower breathability is maintained even after stretching. However, Applicants' claimed films have a water vapor transmission rate that is greater than about $3000 \text{ g/m}^2/24\text{hr}$ due to the fact that the film is stretched prior to laminating with the nonwoven. The pre-lamination stretching helps generate a highly porous structure having enhanced water vapor transmission rates even without the presence of a filler. As shown in Tables 3 and 4 and in Figure 6, the films of Wu cannot simply be stretched to accomplish Applicants' claimed breathabilities. The films in Wu are of the same order of thickness as Applicants' claimed films, but they exhibit a WVTR (or MVTR) of $410 \text{ g/m}^2/24\text{hr}$, which is substantially less than Applicants' claimed $3000 \text{ g/m}^2/24\text{hr}$. Accordingly, contrary to the Examiner's contentions, the degree of breathability may not be optimized simply by stretching. As such, Wu cannot be said to teach or suggest Applicants' claimed invention.

Japan 11-048436 fails to remedy these deficiencies. Japan 11-048436 simply teaches the use of a particulate material as a bulking agent. This agent aids in degradability of the film. However, there is no teaching or suggestion on how a filler may be used to create a microporous structure to provide a finished film having higher water vapor transmission rates. Applicants use a filler to enhance water vapor

transmission rates by creating a higher void volume to get water vapor transmission rates greater than about $3000 \text{ g/m}^2/24\text{hr}$. This is not taught or suggested by Japan 11-048436. And, as shown in Comparative Example C, it cannot be stated that simply by adding a filler will inherently create this breathability. Comparative Example C uses 58% filler, yet results in a breathability of $1500 \text{ g/m}^2/24\text{hr}$. As such, since Japan teaches the addition of a particulate as a bulking agent and not to enhance breathability, and since increased breathability is not inherent simply by adding a particulate filler (Comparative Example C), Japan 11-048436 fails to remedy the deficiencies of Wu and the combination of Wu and Japan 11-048436 fails to teach or suggest Applicants' claimed invention.

For at least the reasons given above, Applicants respectfully submit that Claim 1 and Claim 13 are allowable over the art of record. Furthermore, since Claims 2-12 and 14-25 recite additional claim features and depend from Claim 1 or Claim 13 these claims are also allowable over the art of record. Accordingly, Applicants respectfully request withdrawal of this rejection.

II. Conclusion:

For at least the reasons given above, Applicant submits that Claims 1, 3-8, 12-13, 15-20 and 25 define patentable subject matter. Accordingly, Applicant respectfully requests allowance of these claims.

The foregoing is submitted as a full and complete Response to the Final Office Action mailed November 25, 2002, and early and favorable consideration of the claims is requested.

Should the Examiner believe that anything further is necessary in order to place the application in better condition for allowance, the Examiner is respectfully requested to contact Applicant's representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 11-0855.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Amendments in the Claims

In accordance with 37 C.F.R. 1.121(c), the following versions of the specification and claims as rewritten by the foregoing amendments show all changes made relative to the previous version of the specification and claims.

In the Claims:

Please cancel Claims 2 and 14 without prejudice or disclaimer.

Please amend the claims as follows:

1. (Twice Amended) A breathable, biodegradable/compostable laminate material comprising:

- a. a biodegradable nonwoven material; and
- b. a stretched, filled, biodegradable film;

wherein the breathable, biodegradable/compostable laminate material has a water vapor transmission rate that is greater than about $3000 \text{ g/m}^2/24\text{hr}$;

wherein the biodegradable nonwoven material comprises aliphatic polyesters; polylactides; polyhydroxybutyrate-co-valerates; sulfonated polyethylene terephthalates; blends or mixtures thereof.

13. (Twice Amended) A method of making a breathable, biodegradable/compostable laminate material comprising:

laminating a biodegradable nonwoven material and a filled, biodegradable film to form the breathable, biodegradable/compostable laminate material;

further comprising the step of stretching the filled, biodegradable film before laminating to the biodegradable nonwoven material;

wherein the breathable, biodegradable/compostable laminate material has a water vapor transmission rate that is greater than about $3000 \text{ g/m}^2/24\text{hr}$;

wherein the biodegradable nonwoven material comprises aliphatic polyesters; polylactides; polyhydroxybutyrate-co-valerates; sulfonated polyethylene terephthalates; blends or mixtures thereof.